

Protection of Plant Varieties

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Need To Enhance Trade

- Unique, uniform ,best produce with bulk production needed
- Can be done by developing unique varieties befitting the market requirements
- Through production of these varieties on large scales in the identified agro-climatic zones to maintain the quality
and
- By attaching the uniqueness of the variety with easily marketable traits

Need

Need to develop a linkage between the pace of technological developments and market forces with our Agro-biodiversity wealth

Soft Mechanism for Protection

- NBPGR, New Delhi conserved over 346,000 germplasm accessions of crops and their wild relatives
- Under Field Crops, nearly 3,300 high-yielding varieties/hybrids were developed and released for different agro-ecologies
- Genetic resource in Horticultural crops include germplasm collection of
 - Nearly 2194 accessions of fruits, 11,229 accessions of vegetables, 10,184 accessions in tuber crops, 6336 accessions of spices, 1304 accessions in plantation crops, 1327 accessions in medicinal and aromatic plants
 - Such resources come under the domain of National Biodiversity Authority

Protection of Plant Varieties and Farmers' Rights Act, 2001

- Unique national legislation; Novel Act
- Provides for protection of new plant varieties
- Builds legislation features to protect farmers rights
- Provides an administrative framework for benefit sharing between the beneficiaries
- Complies with standards of TRIPS [article 27.3 (b)]

But

- India is not a member of UPOV
- Used the *sui generis* provision and framed its own rules
- Neither UPOV nor PPV&FRA is linked with the ITPGRFA
- PPV&FRA has no direct link with the BDA, but has *inter alia* implications

PPV&FR Authority

- The Protection of Plant Varieties and Farmer's Rights Authority was established on
 - 11th November 2005 by the Central Government
 - *vide* Gazette Notification No. S.O. 1589(E).PPV&FR Authority
- The enactment and establishment of the Authority was based
 - on the *sui generis* system adopted in harmonization with UPOV system of Novelty, Distinctness, Uniformity and Stability
- Farmers' Rights Section is an unique feature of the Act, which gives the much needed importance to the Farmers

Objectives of PPV&FR Authority

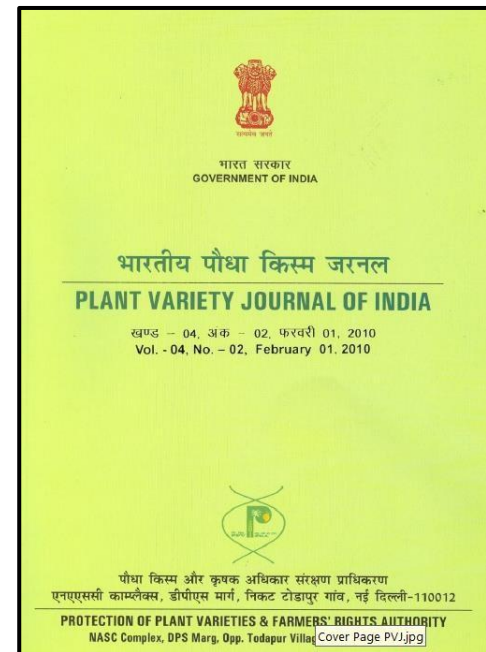
- —To provide an effective system for **protection** of Plant varieties and rights of farmers and plant breeders
- —To recognize the **farmers** in respect of their contribution made at conserving , improving and making available plant genetic resources (in light of FAO and CBD Agenda 21) for development of new plant varieties
- To protect plant breeders' rights to **stimulate** investment for R&D and develop new varieties (essence of UPOV convention)
- To **facilitate** the growth of seed industry to ensure production and availability of high quality seed/planting material

Implementation of PPV&FR Act 2001

- PPV&FR rules **notified** in 2003
- Authority **established** on 11th November, 2005 [**vide Gazette Notification No. S.O. 1589(E).**]
- Regulations **notified** in 2006
- Publication of Plant Variety Journal of India **started** from February-March 2007
- General guidelines for DUS testing and Crop specific DUS test guidelines for 12 crops **were published and released** on 20th February, 2007



<http://www.plantauthority.gov.in>



The Act covers

❖ All propagating material are covered by the PPVFR Act

❖ All types of Variety

- True Variety
- Essentially Derived Variety
- Hybrids
- Parental lines
- Inbred lines
- Stocks
- Transgenics



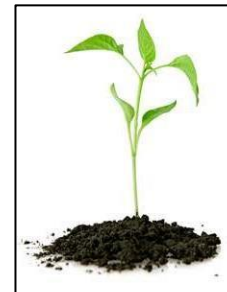
Seed



Cuttings



Grafts



Saplings



Tree

Harvested material



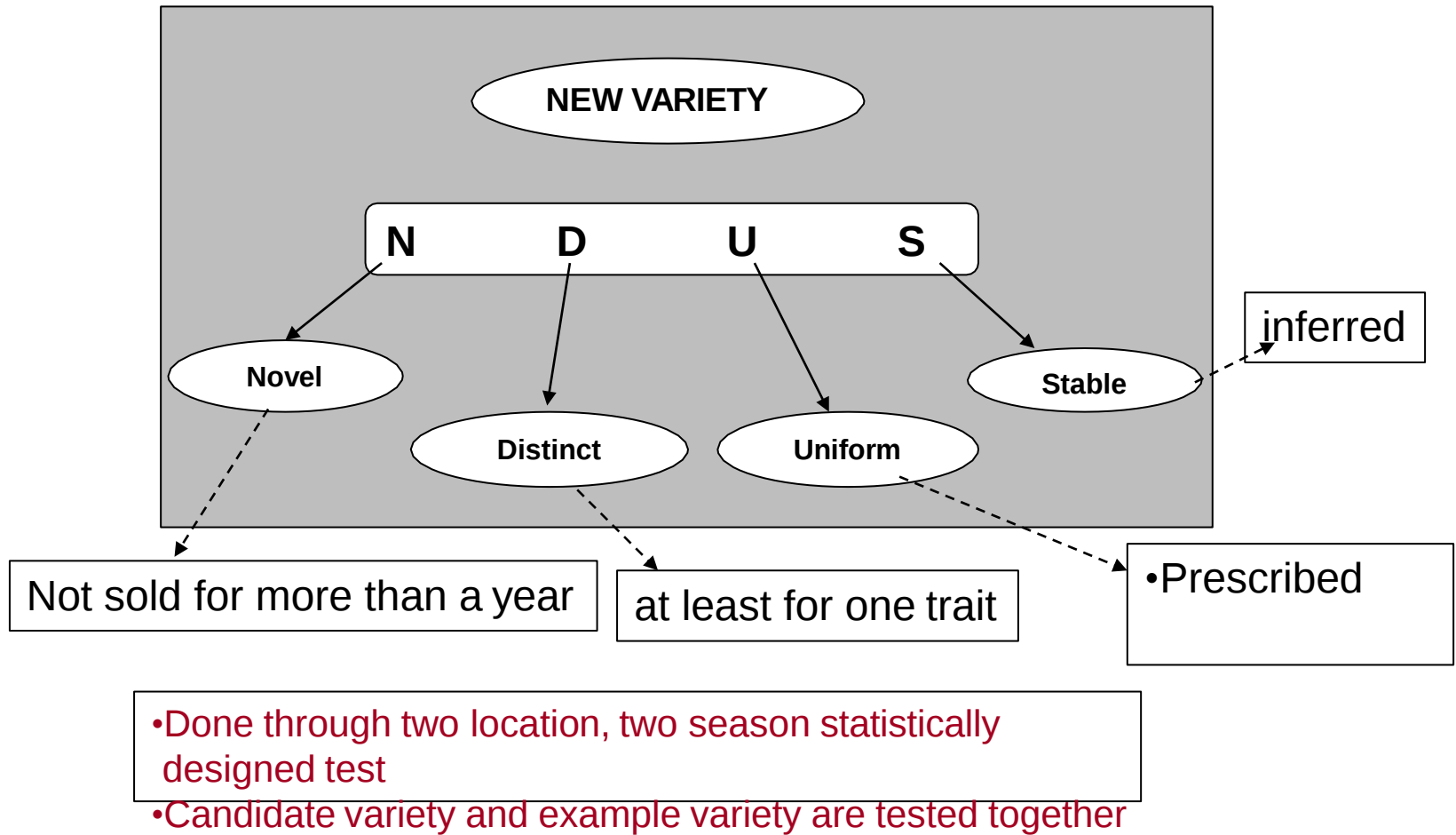
if obtained through unauthorized use of propagating material unless, reasonable opportunity for breeder to exercise his right

Variety	Criteria for Registration	Rights conferred	Duration of Protection
New Variety	• Novelty • Distinctness • Uniformity • Stability	Exclusive right for the breeder to produce, sell, market, distribute, import or export the variety	•Initially 9 years renewable up to total of 18 years for trees and vines •Initially 6 years renewable up to total of 15 for other crops from the date of registration.
Extant Variety*	• Distinctness • Uniformity • Stability	Exclusive right to produce, sell, market, distribute, import or export the variety if claimed by the breeder and in cases where not claimed by breeder, the Central Government or State Government shall have the right	•15 years from the date of notification of that variety by the Central Government under Section 5 of the Seeds Act, 1966
Farmers' Variety	• Distinctness • Uniformity • Stability	Same rights as breeder of a variety	•Initially 9 years renewable up to total of 18 years for trees and vines •Initially 6 years renewable up to total of 15 for other crops from the date of registration.
Essentially Derived Variety	•Genera or species specified by the Central Government and tests to determine if it is an EDV	Same rights as a breeder of a new variety provided that the authorization by the breeder of the initial variety to the breeder of essentially derived variety, subject to terms mutually agreed upon by both the parties	•Initially 9 years renewable up to total of 18 years for trees and vines •Initially 6 years renewable up to total of 15 for other crops

Extant Variety

- As per section 2 (j) is further classified into following categories:
 - Variety Notified under section 5 of the Seeds Act, 1966, also known as Extant Notified Variety (ENV).
 - Example: NCS 145-Bunny (NCHH-145) was notified by CVRC & published in Gazette Notification (vide Notification S.O.1134 (E) dated 15-11-2001).
 - Farmers Variety (FV): is defined as “a variety which has been traditionally cultivated and evolved by the farmers in their fields; or is a wild relative or land race of a variety about which the farmers possess the common knowledge”[
 - Example: 55 applications have been filed as farmers’ variety till 22nd November, 2010. Authority has issued certificate of registration to three rice varieties namely Tilak Chandan, Hansraj and INDRASAN[1].
 - A variety about which there is common knowledge also known as Extant Variety of Common Knowledge (VCK).
 - An official notice was published in the Plant variety journal Volume 3, No. 09 explaining the conditions to be met by a variety to qualify as Extant Variety of Common Knowledge
 - It says that: “A candidate variety should have been sold or otherwise disposed of in India one year prior to the date of filing of the application and it should not have been sold or otherwise disposed of 13 years prior to the date of filing of application and in case of trees and vines it should not have been sold or otherwise disposed of 16 years prior to the date of filing of application.”
 - Example: There are several varieties filed under this category to name a few Karishma-NP 111, VANDANA and PRIYA SWEET CORN
- Any other variety which is in public domain

Criteria for Registration



Plant Variety Protection (PVP) Registration Process

Reception

To receive application and allot PVP number. Coupon to be issued to applicant. Only completed application with all enclosures, registration fee (non-refundable), with the requisite quantity of seeds in officially sealed packing will be accepted. Vegetatively propagated planting material has to be submitted to respective crop specific DUS centre as per details available on website within 10 days of submitting the application with an exception in case of perennial crops as listed on the website where testing will be on site and no propagating material to be enclosed

PVP application number

Updating of records, PVP application number and printing of acknowledgement

Acknowledgement

Application transferred to concerned Registrar

Examination of application

Queries raised by Registrar to be issued within 7 days to the applicant for compliance within 15 days. Within next 7 days, the Registrar shall examine the reply and if acceptable, ask for depositing DUS testing fee. If fee not received in 15 days, application with seed shall be returned to the applicant

Allotment of Registration (REG) number

If the application is accepted, the REG number of the variety shall be informed to the applicant & published in PVJ. REG number shall be the reference number of the variety

• For application received by hand at HQ/branch offices before noon, acknowledgment can be collected between 5:00 to 5:30 pm in exchange of coupon

• For application received in the afternoon, acknowledgment can be collected on next working day between 10:00 to 10:30 am

For applications received through post/courier acknowledgment shall be posted latest by next working day by dispatch section



Dispatch of seed to DUS centre

Registrar to dispatch seed (in case of vegetatively propagated planting material, specific instructions) to concerned DUS centre at least 15 days before the sowing season with the instructions on reference variety/ies based on database



DUS Testing

DUS centres will test the candidate variety as per DUS guidelines. If, at the end of 1st season, it is noted that an essential trait is expressing significant distinctiveness between the locations, then Registrar/nominee along with a representative of the applicant has to visit the sites for consensus decisions during 2nd season



DUS Testing for EDVs

For testing of EDV hybrid/variety DUS characterization is done along with original hybrid/variety (initial hybrid/variety) and in case of hybrid EDV, essentially derived parent(s) and original parent(s) for one year at two locations.



Data analysis

After DUS testing, tabulated and certified pooled data from the centres will be submitted to Registry by the PI within 4 months after harvest. Registrars to take final decision within next 15 working days on the candidate variety



Pre-grant opposition

Published in PVJ for inviting pre-grant opposition. If no pre-grant opposition received within stipulated time as per Section 21 (2)) checklist will be prepared by Registry within 2 weeks and Registration Certificate will be issued to the applicant

Approved on 28.11.2018

List of 158 crop species open for the Registration as New, Extant and

Farmers Variety

Crop		Botanical name
1.	Rice	<i>Oryza sativa</i> L.
2.	Bread wheat	<i>Triticum aestivum</i> L
3.	Maize	<i>Zea mays</i> L.
4.	Sorghum	<i>Sorghum bicolor</i> (L.) Moench
5.	Pearl millet	<i>Pennisetum glaucum</i> (L.) R.Br.
6.	Chickpea	<i>Cicer arietinum</i> L.
7.	Mungbean	<i>Vigna radiata</i> (L.) Wilczek
8.	Urdbean	<i>Vigna mungo</i> (L.) Hepper
9.	Fieldpea	<i>Pisum sativum</i> L.
10.	kidney bean	<i>Phaseolus vulgaris</i> L.
11.	Lentil	<i>Lens culinaris</i> Medik
12.	Pigeon pea	<i>Cajanus cajan</i> (L.) Millsp.
13.	Indian mustard	<i>Brassica juncea</i> L. Czern & Coss
14.	Karan rai	<i>Brassica carinata</i> A Braun
15.	Rapeseed(toria)	<i>Brassica rapa</i> L.
16.	Gobhi sarson	<i>Brassica napus</i> L.
17.	Groundnut	<i>Arachis hypogaea</i> L.
18.	Soybean	<i>Glycine max</i> (L.) Merrill
19.	Sunflower	<i>Helianthus annuus</i> L.
20.	Safflower	<i>Carthamus tinctorius</i> L.
21.	Castor	<i>Ricinus communis</i> L.
22.	Sesame	<i>Sesamum indicum</i> L.
23.	Linseed	<i>Linum usitatissimum</i> L.
24.	Diploid cotton	<i>Gossypium arboreum</i> L.
25.	Diploid cotton	<i>Gossypium herbaceum</i> L.
26.	Tetraploid cotton	<i>Gossypium hirsutum</i> L.
27.	Tetraploid cotton	<i>Gossypium barbadense</i> L.
28.	Jute	<i>Corchorus olitorius</i> L.
29.	Jute	<i>Corchorus capsularis</i> L.
30.	Sugarcane	<i>Saccharum</i> L.
31.	Black pepper	<i>Piper nigrum</i> L.
32.	Small cardamom	<i>Elettaria cardamomom</i> Maton
33.	Turmeric	<i>Curumma longa</i> L.

34	Ginger	<i>Zingiber officinale</i> Rosc.
35	Tomato	<i>Lycopersion lycopersicum</i> (L.) Karsten ex. Farw.
36	Brinjal	<i>Solanum melongena</i> L.
37	Okra	<i>Abelmoschus esculentus</i> (L.) Moench.
38	Cauliflower	<i>Brassica oleracea</i> L.var. <i>botrytis</i>
39	Cabbage	<i>Brassica oleracea</i> L. var <i>capitata</i>
40	Potato	<i>Solanum tuberosum</i> L.
41	Onion	<i>Allium cepa</i> L.
42	Garlic	<i>Allium sativum</i> L.
43	Rose	<i>Rosa</i> spp. (other than <i>R.damascena</i>)
44	Chrysanthemum	<i>Chrysanthemum</i> spp.
45	Mango	<i>Mangifera indica</i> L.
46	Duram wheat	<i>Triticum durum</i> Desf.
47	Dicoccum wheat	<i>Triticum dicoccum</i> L.
48	Other Triticum species	
49	Isabgol	<i>Plantago ovata</i> Forsk
50	Menthol mint	<i>Mentha arvensis</i> L.
51	Damask Rose	<i>Rosa damascena</i> Mill
52	Periwinkle	<i>Catharanthus roseus</i> L.
53	Brahmi	<i>Bacopa monnieri</i> L.Pennell
54	Coconut	<i>Cocos nucifera</i> L.
55	Orchids	<i>Vanda</i>
56	Orchids	<i>Dandrobium</i>
57	Orchids	<i>Cymbidium</i>
58	Pomegranate	<i>Punica granatum</i> L
59	Orchid	<i>Cattleya</i> Lindl.
60	Orchid	<i>Phalaenopsis</i> Blume
61	Eucalyptus	<i>Eucalyptus camaldulensis</i> Dehnh.
62	Eucalyptus	<i>Eucalyptus tereticornis</i> Sm.
63	Casurina	<i>Casuarina equisetifolia</i> L
64	Casurina	<i>Casuarina junghuhniana</i> Miq.
65	Bitter Gourd	<i>Momordica charantia</i> L.
66	Bottle Gourd	<i>Lagenaria siceraria</i> (Mol.) Standl.
67	Cucumber	<i>Cucumis sativus</i> L.
68	Pumpkin	<i>Cucurbita moschata</i> Duch. ex Poir.
69	Barley	<i>Hordeum vulgare</i> L.

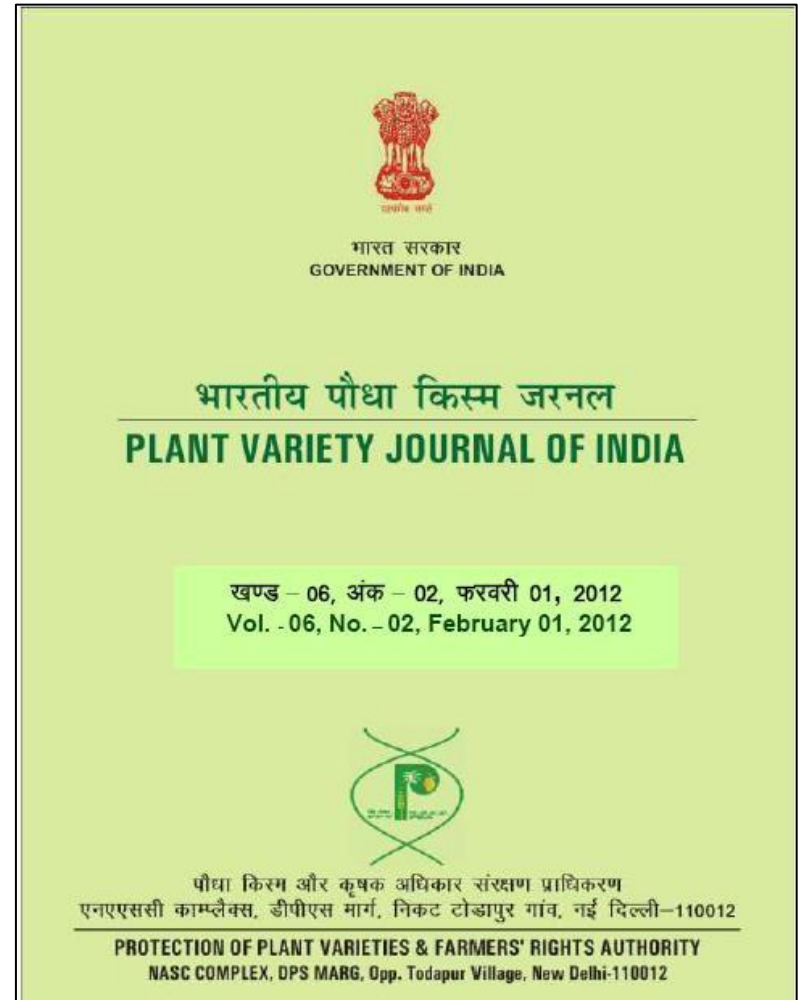
70	Coriander	<i>Coriandrum sativum</i> L.
71	Fenugreek	<i>Trigonella foenum graecum</i> L.
72	Almond	<i>Prunus dulcis</i> (Mill.) D.A. Webb
73	Apple	<i>Malus domestica</i> Borkh
74	Pear	<i>Pyrus communis</i> L.
75	Apricot	<i>Prunus armeniaca</i> L.
76	Cherry	<i>Prunus avium</i> L.
77	Walnut	<i>Juglans regia</i> L.
78	Grapes	<i>Vitis</i> spp.
79	Indian jujube (Ber)	<i>Ziziphus mauritiana</i> Lamk.
80	Tea	<i>Camellia sinensis</i>
81	Tea	<i>Camellia assamica</i>
82	Tea	<i>C. assamica</i> ssp <i>lasiocalyx</i> .
83	Acid Lime	<i>Citrus aurantifolia</i> Swingle
84	Mandarin	<i>Citrus reticulata</i> Blanco
85	Sweet Orange	<i>Citrus sinensis</i> (L.) Osbeck
86	Bougainvillea	<i>Bougainvillea</i> Comm. Ex Juss.
87	Banana	<i>Musa</i> spp.
88	Orchid	<i>Oncidium</i> Sw.
89	Canna	<i>Canna</i> L.
90	Gladiolus	<i>Gladiolus</i> L.
91	Muskmelon	<i>Cucumis melo</i> L.
92	Watermelon	<i>Citrullus Lanatus</i> (Thunb.) Mansf.
93	Jasmine	<i>Jasminum auriculatum</i> . L.
94	Tuberose	<i>Polianthes tuberosa</i> L.
95	Papaya	<i>Carica papaya</i> L.
96	China Aster	<i>Callistephus chinensis</i> (L.) Nees.
97	Peach	<i>Prunus persica</i> L Batsch.
98	Japanese Plum	<i>Prunus salicina</i> L.
99	Strawberry	<i>Fragaria x ananassa</i> Duch.
100	Chilli, Bell Pepper and Paprika	<i>Capsicum annuum</i> L.
101	Finger Millet	<i>Eleusine coracana</i> (L.) Gaertn.
102	Foxtail Millet	<i>Setaria italica</i> (L.) Beauv
103	Vegetable Amaranth	<i>Amaranthus tricolor</i> L.
104	Ridge gourd	<i>Luffa acutangula</i> (L.) Roxb.
105	Spinach beet	<i>Beta vulgaris</i> var. <i>bengalensis</i> Roxb.

106	Carnation	<i>Dianthus caryophyllus</i> L.
107	Orchid	<i>Paphiopedilum</i> Pfitz.
108	Noni	<i>Morinda citrifolia</i> L.
109	Bael	<i>Aegle marmelos</i> (L.) Correa
110	Jamun/Black plum	<i>Syzygium cumini</i> (L.) Skeels.
111	Nutmeg	<i>Myristica fragrans</i> Houtt.
112	Jasmine/Mogra	<i>Jasminum sambac</i> L.
113	Custard apple / Sugar apple	<i>Annona squamosa</i> L.
114	Kalmegh /King of Bitters	<i>Andrographis paniculata</i> (Burm.f.) Wall. ex Nees
115	Karanj	<i>Pongamia pinnata</i> (L.) Pierre.
116	Neem	<i>Azadirachta indica</i> A. Juss.
117	Indian Gooseberry	<i>Emblica officinalis</i> Gaertn.
118	Guava	<i>Psidium guajava</i> L.
119	Litchi	<i>Litchi chinensis</i> Sonn.
120	Marigold	<i>Tagetes</i> spp. L.
121	Betelvine	<i>Piper betle</i> L.
122	Deodar	<i>Cedrus deodara</i> (Roxb.) G.Don
123	Chir Pine	<i>Pinus roxburghii</i> Sargent
124	Mulberry	<i>Morus</i> spp.
125	Jasmine	<i>Jasminum multiflorum</i> L.
126	Common/ Sweet Buckwheat	<i>Fagopyrum esculentum</i>
127	Tartary/ Bitter Buckwheat	<i>Fagopyrum tataricum</i>
128	Rajgeera (the King's grain) or Ramdana (Lord Rama's grain).	<i>Amaranthus hypocondricus</i>
129		<i>Amaranthus cruentus</i>
130		<i>Amaranthus caudatus</i>

131		<i>Amaranthus edulis</i>
132	Faba bean	<i>Vicia faba</i> L.
133	Jatropha	<i>Jatropha curcas</i> L.
134	Proso Millet	<i>Panicum maliaceum</i> L.
135	Barnyard Millet	<i>Echinochloa frumentaceae</i> (Roxb.) Link
136	Little Millet	<i>Panicum sumatrense</i> Roth. Ex. Roemer And Schultes
137	Kodo Millet	<i>Paspalum scorbiculatum</i> L.
138	Elephant Foot Yam	<i>Amorphophallus paeoniifolius</i>
139	Taro	<i>Colocasia esculenta</i>
140	Giant SwampTaro	<i>Cyrtosperma chamissionis/C.merkusii</i>
141	Cashew	<i>Anacardium occidentale</i> L.
142	Arecanut	<i>Areca catechu</i> L.
143	Chironji	<i>Buchananialanzan</i> Spreng.
144	Tamarind	<i>Tamarindusindica</i> L.
145	Sweet potato	<i>Ipomoea batatas</i> (L.) Lam
146	Cassava	<i>Manihotesculenta</i> Crantz.
147	Poplar	<i>Populusdeltoides</i> Bartr.
148	Willow	<i>Salix tetrasperma, Salix nigra, Salix jessoensis, Salix x rubens, Salix matsudana, Salix alba, Salix acmophylla</i> .
149	Oat	<i>Avena sativa</i> L.
150	Date Palm	<i>Phoenix dactylifera</i> L.

Application process

- A monthly published by the PPV&FRA – equivalent to the gazette of the Act.
- Once an application is accepted minimum passport data are published.
- Within 90 days any aggrieved can file objection.
- Those found registerable after DUS test are also brought to notice.
- Regular office orders and to whom so ever concerned are published.



Making PVP Application

- Application Form (Form I for New or Extant Variety or Form II for EDV -- From Regulations)
- Technical Questionnaire (in prescribed Format -- from Regulations)
- Authorization (Form PV-1 -- From Rules)
- Proof of right to make application (Form PV-2 -- From Rules)
- Affidavit swearing in absence of GURT [u/s 29(3)]
- Other prescribed particulars/ Fees/ Seed Sample/ etc

Filing PVP Application

- Application to be filed in triplicate
- To be typed only on one side of the paper and each page to be signed by Applicant/ Authorized Signatory
- Declaration in Form 1 to be signed with stamp
- Technical Questionnaire to be signed with stamp by a witness
- Affidavit declaring absence of GURT/ Terminator Technology to be made on a stamp paper of Rs. 100 denomination
- Denomination of variety on Affidavit and in application form to be exactly same.
 - Even the change of “,” “-“ is not permitted

•In case an application is to be filed in another country, then you must abide by the law/rules/procedures of that country.

Denomination

- The denomination seed submitted for the DUS test should be representative of the candidate variety
- It should be free from physical or chemical treatment.
- Should be free from factors that affect the expression of the variety characters.

Sample Advertisement of New Plant Variety

FORM O - 1
(See Rule 30)

Government of India, Plant Varieties Registry

ADVERTISEMENT OF ACCEPTED APPLICATION FOR REGISTRATION

01. Application No. **N22 ZM 149 08 198** filed on 12/02/2008 by Indian Council of Agricultural Research (ICAR), Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001, India for a new plant variety of crop Maize (Zea mays L.) having denomination Vivek QPM 9, the specification includes its drawing and photograph(s) of which are given below, has been accepted and given registration number -----NA-----on -----NA-----.

The convention application no. -----NA-----, in respect of the said variety has been filed on -----NA-----, in -----NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is Office of the Registrar, PPV & FR Authority, New Delhi - 110 012.

Passport data of the variety **Vivek QPM 9:**

Applicant : Indian Council of Agricultural Research,
Address of the Applicant : Krishi Bhawan, Dr. Rajendra Prasad Road,
New Delhi-110001
Nationality of Applicant : Indian
Application details
a. Number : **N22 ZM 14 08 198**
b. Date of acceptance : 17.12.2009
Crop (Taxonomical Lineage) : Maize (Zea mays L.)
Denomination : Vivek QPM 9
Type of Variety : New
Classification of Variety : Hybrid

Date of Filing

Denomination of Variety

Date of Acceptance

Category of Variety

Previously Proposed Denomination : Not applicable
Name of Parental Material : VQL-1 x VQL-2
Name of Reference Varieties : Vivek Maize Hybrid 9

Variety Description:

A. Group Characteristics	Remarks measured values, example varieties, etc.
Tassel: Time of anthesis (on middle third of main axis, 50% of plants)	Very early [HKI 335]
Ear: Time of silk emergence (50% plants)	Very early [HKI 335]
Ear: Anthocyanin colouration of silks	Present [HKI 323]
Plant: Length	Long [HQPM 1]
Ear: Type of grain	Semi-flint [HKI 1344]

B. Distinct Characteristics:

Vivek QPM 9 has distinguishing characters like small leaf angle between blade and stem, presence of anthocyanin colouration in grains, yellow coloured grains with cap on top of grains, high tryptophan content.

Distinctiveness as compared to reference varieties

C. Reference varieties:

1. **Vivek Maize Hybrid 9:** It has distinguishing characters like small leaf angle between blade and stem, presence of anthocyanin colouration in brace root and leaf sheath, semi-flint grains, yellow coloured grains with cap on top of grains, indented kernel shape with normal tryptophan content.

D. Date of commercialization of the variety : Commercialized since 22/08/2007.

Date of Commercialization/ First Sale

E. Photographs: (See figure 01)

DUS Test Field Monitoring

- DUS experimental fields on a given day are field by expert and others.
 - A fee of Rs. 500/ is charged for others.
- Field data computerized data matrix compared, checked with UPOV and global data base before accepting for registration by the registrar.
- Registrar has magisterial powers and shall owns his responsibility.

Objection

- Once the application is found have claim for registration,
 - then a brief details shall be published in the PVJ
- Within the validity period any one can file a detail or infringement if any to the Registrar on a valid reason on the claims made
- The denomination then goes for further evaluation as a new variety under the provisions of the Act

Follow-up Steps

- Verification of Application for completeness –
 - by PVP Examiner
- Serving notice to complete the application, if required
- Amendment of application to the satisfaction of Registrar
- Advertisement of application
 - Plant Variety Journal of India
- Opposition to the application (manner/ fees/ 3 + 1 month)
- Serving Copy of Notice of Opposition to the Applicant
- Countering the opposition (2 months)

Details of Fee

Registration :

<i>Type of variety</i>	<i>Fees for Registration</i>
Essentially Derived Varieties	Individual Rs. 7000/- Educational Rs. 10000/- Commercial Rs. 50000/-
Extant variety notified under section 5 of Seeds Act, 1966	Rs. 2000/-
New Variety	Individual Rs. 7000/- Educational Rs. 10000/- Commercial Rs. 50000/-
Extant variety about which there is common knowledge	Individual Rs. 7000/- Educational Rs. 10000/- Commercial Rs. 50000/-
Farmers' Variety	No fee

DUS Test :

The applicant has to submit the DUS test fee for conduct of the DUS test of the candidate variety.

The DUS test fee has been decided by the Authority for different crops and notified in the Plant Variety Journal of India.

The DUS test fee notified for different crops

Annual Fee :

For maintenance of registration the applicant has to pay annual fee which is specified as under:

<i>Type of variety</i>	<i>Annual Fee</i>
New Variety	Rs. 2000/- plus 0.2 per cent of the sales value of the seeds of the registered variety during the previous year plus 1 percent of royalty, if any, received during the previous year from the sale proceed of seeds of registered variety.
Farmers' Variety	Rs. 10/- only
Extant variety notified under Section 5 of the Seeds Act, 1966 (54 of 1966)	Rs. 2000/- only.
Extant variety (VCK)	Rs. 2000/- plus 0.1 per cent of the sales value of the seeds of the registered variety during the previous year plus 0.5 percent of royalty, if any, received during the previous year from the sale proceed of seeds of registered variety.
Annual fee shall be determined on the basis of declaration given by the registered breeder or agent or licensee regarding the sales value of the seeds of the variety registered under the Act during the previous year and royalty, if any, received during the previous year from the sale proceed of seeds of the registered variety and verified by the Authority.	

Follow-up Steps

- Issue of certificate of registration
- Publication of list of registered varieties in Plant Variety Journal of India
- Determination of benefit sharing by Authority
- Decision by Order by the Authority (when the claim is proved and admitted)
- Contribution to gene fund
- Benefit sharing/ Compensation payments from gene fund

Rights Under the Act

- 3 types
- Breeders' Rights
 - Breeders will have exclusive rights to produce, sell, market, distribute, import or export the protected variety.
 - Breeder can appoint agent/ licensee and may exercise for civil remedy in case of infringement of rights.
- Researchers' Rights
 - Researcher can use any of the registered variety under the Act
 - for conducting experiment or research
 - This includes the use of a variety as an initial source of variety for the purpose of developing another variety but repeated use needs prior permission of the registered breeder.
- Farmers' Rights

Farmers' Rights

- The PPV &FR Act 2001, permits the farmers, to save, use, sow, re-sow, exchange, share or sell his farm produce including that of the registered variety except that he cannot mark and market it as branded seed with packing, label etc that is demanded by the market.
- Farmers who develop new variety of plants like any other plant breeder can apply their material for registration by DUS testing procedures.

New Regulation for Tree Crops

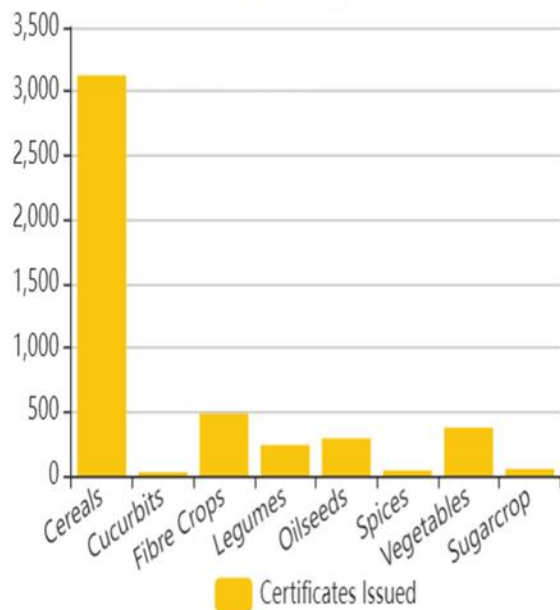
- The Gazette notification issued
 - gives an option to the applicant to go for a normal DUS test
 - or opt for the visit of the expert monitoring team to the orchard site
 - record DUS data and confirm the registerability of the material.

No. of Certificates issued for crop group-wise as on 10.11.2021

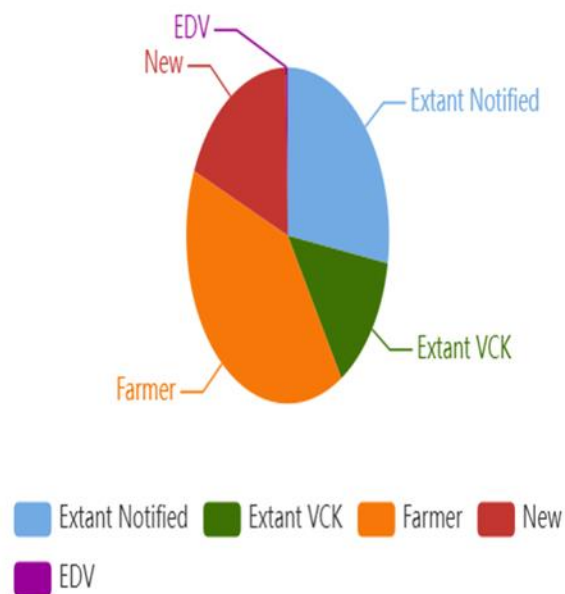
3127 	486 	375 	292 	240 	53 	49 	41 	27 	8 	7 	6 
Cereals	Fibre	Vegetables	Oilseeds	Legumes	Sugar	Fruits	Spices	Cucurbits	Trees	Flowers	Plantation

No. of Certificates issued as on 10.11.2021

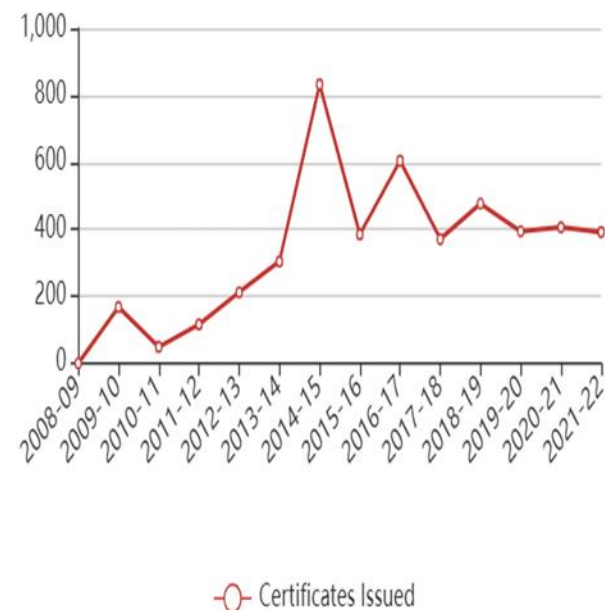
Crop Group wise



Category Wise



Year Wise



Compendium of Varieties Registered under PPV&FR Act, 2001

- » Volume-I (2009-2012)
- » Volume-II (2013-2017)

Additional Compendium

- » Compendium of Extant Notified Varieties Registered under PPV&FR Act, 2001
- » Compendium of Farmers Varieties Registered under PPV&FR Act, 2001
- » Compendium of Registered Varieties under PPV&FR Act, 2001 (upto October 2018)

<https://plantaauthority.gov.in/compendium-varieties-registered-under-ppvfr-act-2001>

Revocation of Rights-Pepisco Case



Pepisco's registration of the variety revoked PPV&FRA –Dec 2021

Source: The Hindu-Dec 3,2021

FL-2027 variety used in Lays potato chips

- Introduced to India in 2009,
- crop grown by about 12,000 farmers
- Through exclusive contract with PepsiCo to sell seeds and buy back their produce.

In 2016, registered the variety under the PPV&FR Act, 2001.

In 2019,PepsiCo India sued nine Gujarati farmers

- for allegedly infringing patent rights by growing its registered potato variety
- **Alliance for Sustainable and Holistic Agriculture**, filed the petition to revoke registration
- The PPV&FRA questioned the documentation produced by PepsiCo claiming it was the owner of the variety,

- **Reference:**

Vilas A Tonapi et al 2009. Plant Variety protection made easy.207pp. (ISBN 81-89335-25-1).

Second Edition . April 2010